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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/303,424	05/03/1999	JUSSI LEMILAINEN	017.37066X00	8349

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EXAMINER

DURAN, ARTHUR D

ART UNIT	PAPER NUMBER
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3622

DATE MAILED: 01/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

8K

Office Action Summary	Application No. 09/303,424	Applicant(s) LEMILAINEN ET AL.	
	Examiner Arthur Duran	Art Unit 3622	

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-35 have been examined.

Response to Amendment

2. The Amendment filed on 1/5/04 is insufficient to overcome the Rai and Barber reference.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-3, 5-18, 21-30, 32, 34, 35 are rejected under 35 U.S.C. 102(e) as being unpatentable over Rai (6,577,643).

Claims 1, 21, 22, 23, 24, 25, 26, 27: Rai discloses charging for pay-per-access to a vendor network. Rai further discloses:

inputting a user request to a first network which requests that the user be authorized for connection to the packet data network that the web page is on through a second network;

transmitting from the first network to the second network the user request and an authorization of payment to the second network by the first network for the use by the user of the packet data network;

transmitting from the second network to the first network authentication information granting the user authentication to obtain connection through the second network to the packet data network; and

transmitting the authentication information from the first network to the user which informs the user that authentication to obtain connection to the packet data network has been obtained (Fig. 3; col 6, line 64-col 7, line 12; col 8, lines 40-62; col 4, line 60-col 5, line 7; col 26, line 48-57; col 25, lines 42-50).

Rai further discloses that an access to a webpage on a network can be set to be valid during specific times or limited time periods (col 28, lines 9-25; col 26, line 63-col 27, line 5; col 29, lines 57-65; col 30, lines 13-19; col 19, lines 26-31).

Rai further discloses a first network, a second network, and a packet data network (Fig. 3; col 6, line 64-col 7, line 12; col 8, lines 40-62; col 4, line 60-col 5, line 7; col 26, line 48-57; col 25, lines 42-50).

Rai further discloses that the second network debits from a stored value of service units which have been granted to the user a number of consumed service units, which are identified in each request for consumption of at least one service unit until the number of consumed service

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units equals the number of granted service units (col 27, line 44-col 30, line 46; col 6, lines 26-35).

Rai further discloses the user roaming the second network (Fig. 3; col 6, line 64-col 7, line 12; col 8, lines 40-62; col 4, line 60-col 5, line 7; col 26, line 48-57; col 25, lines 42-50).

Claim 2: Rai discloses a method in accordance with claim 1, and further discloses that the user request includes a quantification of connectivity which the user requests to the packet data network (col 27, line 44-col 30, line 46; col 6, lines 26-35).

Claim 13, 14, 15, 16, 17: Rai discloses a method in accordance with claim 1, 2, 3, 4, 5, and further discloses that the inputting of the user request to the first network, the transmitting of the user request and an authorization of payment to the second network, and the transmitting of the authentication information from the second network to the first network and to the user are by secure communications (col 2, lines 8-14).

Claim 3, 30, 32: Rai discloses a method in accordance with claim 2, and further discloses that the quantification comprises at least one service unit with each service unit being encoded with a random number (col 30, lined 45-56; col 26, lines 4-10).

Rai further discloses that the user request includes a quantification of connectivity which the user requests to the packet data network (col 27, line 44-col 30, line 46; col 6, lines 26-35)

Rai further discloses these features at the following citations (col 27, lines 15-60; col 29, line 40-col 30, line 56).

Claim 5, 7, 9, 11, 28: Rai discloses a method in accordance with claim 1, 2, 3, 4, and further discloses that the authentication information comprises a shared key which may be used

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to create secure communications between the user and the packet data network (col 26, lines 4-10; col 30, lined 45-56)

Claim 6, 8, 10, 12, 29: Rai discloses a method in accordance with claim 5, 7, 11 and further discloses that authentication information is a subscriber identification module SIM comprising a number n of service units with each service unit comprising a different random access number uniquely identifying each service unit, a signed response SRES and the shared key Kc (col 27, line 44-col 30, line 46; col 26, lines 4-10; col 30, lined 45-56).

Claim 18, 34, 35: Rai discloses a method in accordance with claim 3, and further discloses that after the user is informed that authentication to obtain connection to the packet data network has been obtained, the user transmits to the second network at least one request for consumption of at least one service unit comprising a random number RAND and a signed response SRES; the second network compares the random number RAND and signed response SRES of each request for consumption of at least one service unit received from the user with stored random numbers RAND and signed responses SRES to determine if a match exists; and if a match exists, the second network permits data packets to pass through the second network between the user and the packet network (col 27, line 44-col 30, line 46; col 26, lines 4-10; col 30, lined 45-56; Fig. 3; col 6, line 64-col 7, line 12; col 8, lines 40-62; col 4, line 60-col 5, line 7; col 26, line 48-57; col 25, lines 42-50).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 4, 19, 20, 31, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rai (6,577,643) in view of Barber (5,930,777).

Claim 4, 31, 33: Rai discloses a method in accordance with claim 3. Rai further discloses that each service unit is encoded with a random number (col 30, lined 45-56; col 26, lines 4-10).

Rai further discloses the utilization of secure networks (col 2, lines 10-14).

Rai does not explicitly disclose that each service unit has a different random number. However, Barber discloses that each service unit is encoded with a different random number (col 30, lined 45-56).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add Barber's utilization of different random numbers to Rai's utilization random numbers. One would have been motivated to do this to ensure a higher level of security.

Claim 19, 20: Rai discloses a method in accordance with claim 19. Rai further discloses a table (col 37, line 60-col 38, line 40) and extensive accounting procedures (col 27, line 44-col 30, line 46). Rai does not explicitly disclose debiting or a hash table.

However, Barber discloses that the second network debits from a stored value of service units which have been granted to the user a number of consumed service units which are identified in each request for consumption of at least one service unit until the number of

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consumed service units equals the number of granted service units (col 5, lines 50-56; col 9, line 23-30; col 2, lines 62-66).

However, Barber discloses that each unused service unit is stored in the second network in a hash table and each used service unit is stored in the second network in a hash table (col 10, lines 17-67; col 8, lines 45-65).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add Barber's utilization of debiting and a hash table to Rai's utilization of tables and accounting information. One would have been motivated to do this because a debiting is an obvious way of managing a user account and a hash table is an obvious way of recording user utilization and accounting information.

Response to Arguments

5. Applicant's arguments with respect to claims 1-35 have been considered but are not found persuasive.

Examiner notes that while specific references were made to the prior art, it is actually also the prior art in its entirety that is being referred to.

Examiner further notes that it is the Applicant's claims as stated in the Applicant's claims that are being rejected with the prior art.

On page 21 of the Applicant's Amendment dated 1/5/04, Applicant states, "Moreover, the network of the type described by Rai et al doe not. . .addresses the situation where the user wishes to remain anonymous or where there is no roaming agreement," and "arrangements that

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do not involve a prior contractual relationship between the home network and the network in which the mobile equipment is roaming”.

However, the Applicant’s claims do not include the words anonymous nor contract nor contractual nor agreement nor roaming agreement nor prior nor new nor billing.

Hence, the Applicant’s claims do not disclose that the user is anonymous or that there is not a prior roaming agreement or prior contract, etc.

On page 20, the Applicant states, “there is no transmission of an authorization of payment to the second network by the first network for the use by the user of the packet data network.”

However, Rai discloses authorization of the utilization of the networks that occurs for each connection or utilization of the network (col 16, lines 51-61; col 16, lines 51-col 17, line 67) and the authorization of payment to the second network by the first network that occurs for each utilization of the second network (col 23, lines 15-19; col 25, lines 41-46). Note that in the authenticating for accounting and billing (col 25, lines 41-46) that the authenticating occurs for every utilization of the foreign network and that the registration that Rai speaks of is not a one time registration but rather a registration that occurs for every connection or utilization of the foreign network (col 26, lines 21-47).

On page 21, the Applicant states, “it is requested that he specifically point out where in Rai et al he finds the user request, including a quantification of connectivity which the user requests to the packed data network. . .with each service unit being encoded with a random number.” However, Rai discloses a quantification of connectivity to the user and that encryption an shared secret are sent to the user (col 26, lines 21-47; (col 23, lines 15-22).

Applicant further states that Rai does not disclose that the user request includes a quantification of connectivity which the user requests to the packet data network and that the quantification comprises at least one service unit with each service unit being encoded with a random number.

Also, note in the Applicant's claims that that while each service unit is encoded with a random number, the claims do not specify that each service unit is encoded with a different random number. That is, as stated in the Applicant's claims, each service unit of a session could utilize the same random number.

Furthermore, as stated in the Applicant's claims, the user request includes a quantification of connectivity which the user requests to the packet data network is similar to the user requesting billing or accounting of the user's utilization of the network (col 27, lines 15-60; col 29, line 40-col 30, line 56).

Furthermore, as stated in the Applicant's claims, the quantification comprises at least one service unit with each service unit being encoded with a random number is similar to the billing or accounting statement disclosing how much per time, per byte, etc the user used of the network where the user's utilization of the network was encrypted per unit (col 27, lines 15-60; col 29, line 40-col 30, line 56).

Please see these citations as well as the citations in the rejection of claims 3, 30, 32 above and the citations also listed in the Response to Arguments above.

In regards to Arguments concerning claims 5-7, 9-19, 23, 25, 27, 28-32, 34, 35, please see the comments above as well as the cited sections in the claim rejections. Also, note that the entire Rai reference and all its features are being referred to in a prior art reference.

In response to applicant's argument that the examiner's conclusion of obviousness in the combination of the Rai and Barber references is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arthur Duran whose telephone number is (703)305-4687. The examiner can normally be reached on Mon- Fri, 7:30-4:00.

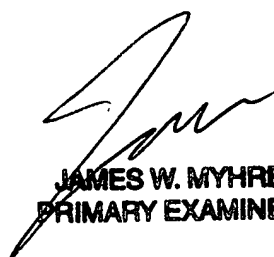
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Stamber can be reached on (703)305-8469. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9326.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-1113.

AO

1/20/04


JAMES W. MYHRE
PRIMARY EXAMINER